



Profile data indicate that thermal stratification was present early in the season. There was no build up of phosphorus in the deep water. Chlorophyll data indicated that algae were equally distributed through the shallow depths of the water column.

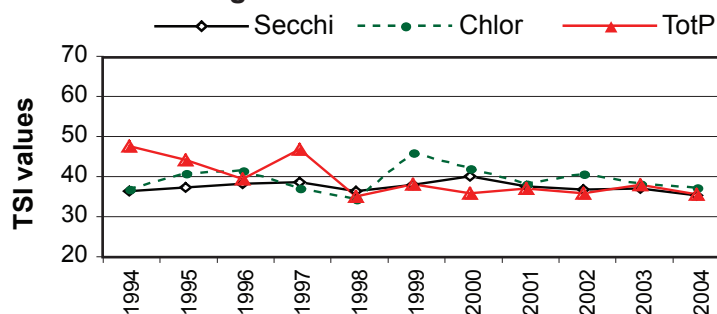
The 2004 TSI values were very close to each other at the high end of the oligotrophic range, similar to 2001 and 2003.

### Chlorophyll Concentrations and Algae

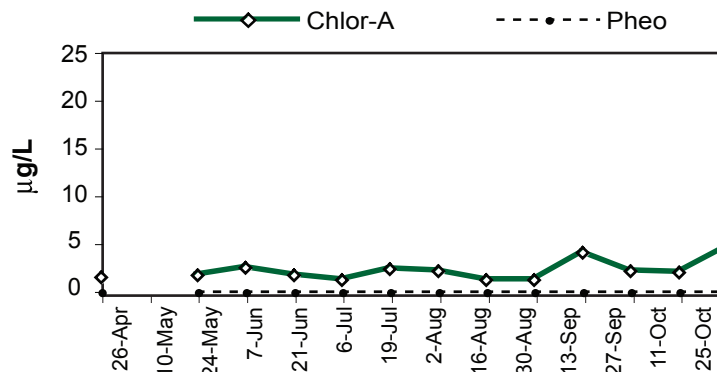
Chlorophyll was very low through the sample season, with a small increase in the fall. The most common species included the diatoms *Fragilaria crotonensis* and *Asterionella formosa*, the colonial bluegreens *Anacystis* and *Snowella*, and several species of cryptophytes.

Date	Secchi	depth-m	degC	Chlor-A	TP µg/L	TN µg/L
5/24/04	6.3	1	20.0	1.80	8.7	521
		9	11.0	1.90	11.5	666
		18	6.5		16.5	715
8/30/04	5.6	1	24.5	1.30	8.6	406
		9.5		1.80	11.2	714
		17			7.5	606

### TSI Ratings



### Chlorophyll a Concentrations (µg/L)



### Common Algae

	Group
<i>Asterionella formosa</i>	Bacillariophyta
<i>Anacystis</i> sp	Cyanobacteria
<i>Cryptomonas</i> sp	Cryptophyta

## 2004 Level I Data

Daily Data Summary					Weekly Data Summary													
Week of	Sum of precip. (mm)	# of days	Avg of lake level (cm)	# of days	Sample date	Sample time	Secchi (m)	Temp (°C)	Algae* (Shore)	Algae* (at site)	Goose Count*							
28-Sep-03	0.0	4			3-Oct-03	11:30	6.3	19.0	NA	C1	0							
5-Oct-03	11.0	7																
12-Oct-03	50.0	7																
19-Oct-03	158.0	7																
26-Oct-03	0.0	7																
2-Nov-03	0.0	7																
9-Nov-03	10.0	7																
16-Nov-03	67.0	7																
23-Nov-03	61.0	7																
30-Nov-03	42.0	1																
7-Dec-03	32.0	7																
14-Dec-03	18.0	7																
21-Dec-03	14.0	4																
28-Dec-03	20.0	2																
4-Jan-04	78.0	2																
11-Jan-04	22.0	6																
18-Jan-04	34.0	1																
25-Jan-04	84.0	7																
1-Feb-04	24.0	7																
8-Feb-04	10.0	7																
15-Feb-04	22.0	7		12-Feb-04	1:00	4.0	5.0	C1	C1	0								
22-Feb-04	9.0	7																
29-Feb-04	46.0	7																
7-Mar-04	4.0	7																
14-Mar-04	0.0	5																
21-Mar-04	0.0	0																
28-Mar-04	0.0	0																
4-Apr-04	0.0	0																
11-Apr-04	63.0	7																
18-Apr-04	16.0	7																
25-Apr-04	12.0	7		1-May-04	15:00	6.0	18.0	P1	P1	0								
2-May-04	14.0	1																
9-May-04	22.0	3																
16-May-04	4.0	7																
23-May-04	86.0	7																
30-May-04	14.0	7		1-Jun-04	10:00	6.0	17.0	P1	P1	4								
6-Jun-04	13.0	7																
13-Jun-04	10.0	2																
20-Jun-04	6.0	1																
27-Jun-04	0.0	7																
4-Jul-04	0.0	7		12-Jul-04	11:00	5.5	23.5	P1	P1	0								
11-Jul-04	0.0	7																
18-Jul-04	0.0	7																
25-Jul-04	0.0	7																
1-Aug-04	28.0	7																
8-Aug-04	0.0	7		10-Aug-04	10:00	6.5	24.0	P1	P1	0								
15-Aug-04	0.0	7																
22-Aug-04	91.0	7																
29-Aug-04	9.0	7																
5-Sep-04	0.0	6																
12-Sep-04	80.0	4																
19-Sep-04	6.0	7																
26-Sep-04	0.0	5																
Min	0.0										0.0		Min		4.0	5.0		
Max	158.0										0.0		Max		6.5	24.0		
Total	1290.0																	

\* See introduction for discussion of algae assessment and goose count methods.

## 2004 Level II Data

Date (2004)	Temp (°C)	Secchi (m)	Chl-a (µg/l)	TP (µg/l)	TN (µg/l)	Algae Obsv.	N:P	Calculated TSI		
								Secc	chl-a	TP
26-Apr	20.0	5.2	1.60	7.4	646	1	87	36.2	35.2	33.0
10-May										
24-May	20.0	6.3	1.80	8.7	521	1	60	33.4	36.3	35.4
7-Jun	20.0	6.2	2.56	7.8	522		67	33.7	39.8	33.8
21-Jun	25.0	5.6	1.80	13.2	568	2	43	35.1	36.3	41.4
6-Jul	22.0	4.9	1.30	6.8	496	1	73	37.1	33.1	31.8
19-Jul	20.0	5.6	2.40	15.2	537	1	35	35.1	39.2	43.4
2-Aug	22.5	4.6	2.24	7.9	413	1	52	38.0	38.5	34.0
16-Aug	24.5	5.8	1.30	8.0	459	0	57	34.6	33.1	34.1
30-Aug	24.5	5.6	1.30	8.6	406		47	35.1	33.1	35.2
13-Sep	20.0	4.8	4.17	11.2	438	2	39	37.4	44.6	39.0
27-Sep	17.5	5.6	2.24	7.4	342	1	46	35.1	38.5	33.0
11-Oct	13.5	5.6	2.08	9.7	392	1	40	35.1	37.8	36.9
25-Oct	9.5	4.6	4.71	9.5	395	1	42	38.0	45.8	36.6
	Temp (°C)	Secchi (m)	Chl-a (µg/l)	TP (µg/l)	TN (µg/l)	Algae	N:P	Calculated TSI		
								Secc	chl-a	TP
Mean	19.9	5.4	2.3	9.3	471.9	1.1	53	35.7	37.8	36.0
Median	20.0	5.6	2.1	8.6	459.0	1	47	35.1	37.8	35.2
Min	9.5	4.6	1.3	6.8	342.0	0	35	33.4	33.1	31.8
Max	25.0	6.3	4.7	15.2	646.0	2	87	38.0	45.8	43.4
Count	13	13	13	13	13	11	13	13	13	13

TSI Average = 36.5